

**GREG BEST
CONSULTING, INC.**

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October 25, 2017

**SUPPLEMENTAL TECHNICAL EXHIBIT OF THE KDOC-TV MINOR
CHANGE APPLICATION FOR EXPANDED SERVICES**

This exhibit summarizes major technical facility parameters and provides supplemental information regarding this application for KDOC-TV proposed technical facilities to expand its service area. In particular, the exhibit addresses the interference analysis, FCC Rule 73.622 allowing a station to increase its coverage to meet the “largest station in the market”, and coordination with Mexico.

The basic operating parameters of the proposed facility are as follows:

Latitude: 34-13-55 N
Longitude: 118-04-21 W
ERP: 110 kW
Channel: 12
Frequency: 207.0 MHz
AMSL Height: 2016.0 m
Antenna: DIE-THV5A12 C170 rotated 210.0 deg

SUMMARY OF INTERFERENCE ANALYSIS

The attached interference analysis has evaluated all potentially impacted FCC authorized services and pending applications. The evaluation of each protected facility is detailed in the report. These potentially impacted services have been evaluated with the TV Study program as configured with standard defaults unless noted otherwise. The results indicate that the proposed facility complies with the applicable FCC rules and concludes any potential interference is de minimis (<0.5%).

FACILITIES ARE SMALLER THAN LARGEST STATION IN THE MARKET

FCC Rule 73.622 (f) (5) allows stations to make application that provide coverage up to the largest station in its market. KCOP is the largest station in the Los Angeles DMA. KCOP has an area over land of 42052 sq km. The coverage of the proposed KDOC facility covers 40831 sq km over land. While it is not quite as large as KCOP, it is expected to provide sufficient reception for KDOC’s viewership. In order to obtain this coverage, the ERP increases to 110 kW, which is greater than ordinarily permitted under Section 73.622(f)(1) of the rules but fits within the “largest station” exception established by Section 73.622(f)(5).

COORDINATION WITH MEXICO

The location of the proposed facility is within the coordination distance with Mexico, thus requiring coordination with Mexico. The attached letter from the Mexican Broadcast Regulatory agency confirms that the KDOC proposed facility has been prior coordinated according to the frequency coordination agreement in place between Mexico and the United States.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory D. Best, PE". The signature is written in a cursive style with a horizontal line through the middle.

President

tvstudy v2.2.3 (DAezul)

Database: localhost, Study: KDOC 110 KW CP RCAMSL 2016, Model: Longley-Rice

Start: 2017.10.23 21:57:46

Study created: 2017.10.23 21:57:14

Study build station data: LMS TV 2017-10-14 (20)

Proposal: KDOC-TV D12 DT BL ANAHEIM, CA

File number: KDOC 110 KW CP

Facility ID: 24518

Station data: User record

Record ID: 201

Country: U.S.

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
KTTV	D11	DT	LIC	LOS ANGELES, CA	BLCDT20100709AFD	1.1 km
KCOP-TV	D13	DT	LIC	LOS ANGELES, CA	BLCDT20100709AFG	1.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D12

Latitude: 34 13 55.00 N (NAD83)

Longitude: 118 4 21.00 W

Height AMSL: 2016.0 m

HAAT: 1108.9 m

Peak ERP: 110 kW

Antenna: THV-5A12 VP C170 210.0 deg

Elev Pattn: Generic

Tilts: elec 1.50, mech 1.00 @ 210.0 deg

36.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	5.62 kW	564.5 m	105.9 km
45.0	4.31	543.2	102.7
90.0	38.4	989.9	137.2
135.0	106	1539.2	160.3
180.0	98.4	1674.9	159.6
225.0	93.6	1596.7	158.9
270.0	110	1128.2	154.0
315.0	66.7	834.9	140.0

Proposal record zone is undefined, ERP vs. HAAT check not performed

**Proposal service area extends beyond baseline plus 1.0%
Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 1619.7 km

**Proposal is within coordination distance of Mexican border
Distance to Mexican border: 191.1 km

Conditions at FCC monitoring station: Livermore CA
Bearing: 320.6 degrees Distance: 510.2 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 56.3 degrees Distance: 1308.4 km

Study cell size: 2.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to BLCDT20100709AFD LIC, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KTTV	D11	DT	LIC	LOS ANGELES, CA	BLCDT20100709AFD	
Undesireds:	KDOC-TV	D12	DT	BL	ANAHEIM, CA	DTVBL24518	0.3 km
	KDOC-TV	D12	DT	BL	ANAHEIM, CA	KDOC 110 KW CP	1.1
	KERO-TV	D10	DT	LIC	BAKERSFIELD, CA	BLCDT20100929AEF	144.9
	KGTV	D10	DT	LIC	SAN DIEGO, CA	BLCDT20090410ANQ	171.5
	KYMA-DT	D11	DT	LIC	YUMA, AZ	BLCDT20100915ABS	326.4
	KNSO	D11	DT	LIC	MERCED, CA	BLCDT20100202ABE	339.7
	KCBA	D11	DT	CP	SALINAS, CA	BLANK0000028196	419.5
	KLVX	D11	DT	LIC	LAS VEGAS, NV	BMLEDT20120124ACO	341.3

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
55607.8 17,952,596	48162.1 17,591,882	47433.5 17,485,593	47206.0 17,431,298	0.48 0.31

Undesired	Total IX	Unique IX, before	Unique IX, after
KDOC-TV D12 DT BL	27.9	22,870	27.9 22,870
KDOC-TV D12 DT BL	263.3	77,165	255.4 77,165
KERO-TV D10 DT LIC	8.0	15	4.0 14

KGTV D10 DT LIC	187.5	42,206	187.5	42,206	187.5	42,206
KYMA-DT D11 DT LIC	51.9	2	43.9	2	43.9	2
KNSO D11 DT LIC	111.2	336	107.2	335	99.2	335
KLVX D11 DT LIC	354.1	40,861	346.1	40,861	346.1	40,861

Interference to BLCDT20100709AFG LIC, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KCOP-TV	D13	DT	LIC	LOS ANGELES, CA	BLCDT20100709AFG	
Undesireds:	KDOC-TV	D12	DT	BL	ANAHEIM, CA	DTVBL24518	0.3 km
	KDOC-TV	D12	DT	BL	ANAHEIM, CA	KDOC 110 KW CP	1.1
	KSWT	D13	DT	LIC	YUMA, AZ	BLCDT20120426ABZ	326.4
	KTNV-TV	D13	DT	LIC	LAS VEGAS, NV	BMLCDT20121219AAK	334.7

Service area	Terrain-limited	IX-free, before	IX-free, after	Percent New IX
56063.4 17,976,764	47884.5 17,520,456	47538.3 17,486,340	47402.5 17,455,318	0.29 0.18

Undesired	Total IX	Unique IX, before	Unique IX, after
KDOC-TV D12 DT BL	23.9	22,870	23.9 22,870
KDOC-TV D12 DT BL	159.7	53,892	159.7 53,892
KSWT D13 DT LIC	16.0	20	12.0 20
KTNV-TV D13 DT LIC	310.3	11,226	306.3 11,226

Interference to proposal, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KDOC-TV	D12	DT	BL	ANAHEIM, CA	KDOC 110 KW CP	
Undesireds:	KTTV	D11	DT	LIC	LOS ANGELES, CA	BLCDT20100709AFD	1.1 km
	KCOP-TV	D13	DT	LIC	LOS ANGELES, CA	BLCDT20100709AFG	1.1

Service area	Terrain-limited	IX-free	Percent IX
63326.2 18,396,459	53625.5 17,708,320	53613.5 17,704,507	0.02 0.02

Undesired	Total IX	Unique IX	Prcnt Unique IX
KTTV D11 DT LIC	12.0	3,813	0.00 0.00
KCOP-TV D13 DT LIC	12.0	3,813	0.00 0.00



INSTITUTO FEDERAL DE
TELECOMUNICACIONES

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UNIDAD DE ESPECTRO RADIOELÉCTRICO
DIRECCIÓN GENERAL DE INGENIERÍA
DEL ESPECTRO Y ESTUDIOS TÉCNICOS

IFT/222/UER/DG-IEET/0873/2017

Ciudad de México, a 12 de julio de 2017

OLGA MADRUGA-FORTI

Chief, Global Strategy and Negotiation Division
International Bureau
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

PRESENTE

Me refiero a su comunicado de fecha 29 de junio del presente año, recibido vía correo electrónico de la misma fecha, mediante el cual solicita en términos de lo establecido en el *Memorándum de Entendimiento entre la Secretaría de Comunicaciones y Transportes de los Estados Unidos Mexicanos y la Federal Communications Commission de los Estados Unidos de América, relativo al uso de las bandas de 54 a 72 MHz, 76 a 88 MHz, 174 a 216 MHz y 470 a 806 MHz, para el servicio de radiodifusión de Televisión Digital a lo largo de la frontera común*, la coordinación para modificar los parámetros técnicos con que quedó registrada en la Tabla 6: Plan de adjudicaciones de los Estados Unidos de América una adjudicación de TDT.

Sobre el particular, se informa a usted que como resultado del estudio realizado a la propuesta planteada por esa Comisión para modificar la adjudicación del canal 12 de televisión digital en Anaheim, CA, aplicando la metodología Longley-Rice establecida en el Memorándum de Entendimiento antes mencionado, este Instituto ha determinado que dicha propuesta es de aceptarse por virtud de que brinda protección a las adjudicaciones mexicanas de televisión digital, motivo por el cual se registra de la siguiente manera en Apéndice 7 del Memorándum de Entendimiento, así como en la Tabla 6 antes mencionados:

1 Canal:	12
2 Ciudad, Estado:	Anaheim, CA

*"Año del Centenario de la Promulgación
de la Constitución Política de los Estados Unidos Mexicanos"*

Insurgentes sur 1143,
Col. Nochebuena, C.P. 03720
Delegación Benito Juárez,
Ciudad de México.
Tels. (55) 5015 4000

- 3 Coordinadas geográficas del transmisor: LN: 34°13'55.00"
LW: 118°04'21.00"
- 4 Distintivo de llamada: KDOC-TV
- 5 Potencia radiada aparente (PRA): 110.000 kW
- 6 Altura del Centro de Radiación Sobre el Nivel del Mar: 2016.00 metros
- 7 Antena: Direccional (AD, con el patrón de radiación anexo a la solicitud)

ATENTAMENTE
EL DIRECTOR GENERAL



RICARDO CASTAÑEDA ÁLVAREZ

En cumplimiento del "Acuerdo mediante el cual el Pleno del Instituto Federal de Telecomunicaciones expide los Lineamientos de Austeridad y Ajuste Presupuestario para el ejercicio fiscal 2016", se informa que las copias de conocimiento que se marcan en el presente documento, se enviarán por medios electrónicos.

c.c.p. THOMAS P. SULLIVAN.- Acting Chief of the International Bureau Office at the Federal Communications Commission.- 445 12th Street, SW, Washington, D.C. 20554.- Presente.